PIERCE'S NEWLY-INVENTED
PYRO-PNEUMATIC, PURE WARM AIR, SELF-ACTING, AND VENTILATING STOVE-GRATE,

ADAPTED FOR

CHURCHES, CHAPELS, INFANT AND OTHER SCHOOLS, PUBLIC BUILDINGS OR PRIVATE DWELLINGS, BANKING HOUSES, RAILWAY OFFICES, PICTURE GALLERIES, ENTRANCE HALLS, LECTURE ROOMS, INVALIDS' APARTMENTS, &c. &c.

This Stove-Grate possesses the cheerful open fire, and from the NOVELTY of its principle, ECONOMY in use, and ELEGANCE of design, renders it more suitable than any other, where these advantages, combined with purity of atmosphere, are important.

Prices 7l., 9l. 10s., 12l. 10s., and 16l. in plain design.

These newly-invented Stove Grates have received the most favourable notices of the public press, for which see the prospectus, with numerous testimonials, which will be forwarded on application, and every information afforded.

For the economical enjoyment of Health, Warmth, Ventilation, and Comfort, being the only PURE WARM-AIR STOVE-GRATE yet invented that is constructed entirely of fire-lumps, without any heating surface of iron; is peculiarly adapted for the efficient warming and ventilating Churches, Chapels, Schools, Public Rooms, Hotels, Invalids' Apartments, &c.

It may be seen in daily use at the University Hall, Gordon-square; the Polytechnic Institution; the Giraffe-house of Zoological Society, Regent's-park; Westminster Chapel; Lloyd's Registry of Shipping, Cornhill; Guy's Hospital; the Bank of Messrs. Alexander and Co., Lombard-street; and at the Manufactory, 5, Jermyn-street.

Manufactured only by PIERCE, in Registered Designs, protected by Act of Parliament, at his Warehouse and Manufactory, No. 5, JERMYN-STREET, REGENT-STREET, where it may be seen in use with a most extensive variety of his much-approved

ECONOMICAL RADIATING STOVE-GRATES,

Of the LATEST DESIGNS, in the Louis Quatorze, Renaissance, Gothic, and other styles, with ORNAMENTAL HEARTHS and FENDERS, quite unique, adapted in style and colours to the decoration of the rooms for which they are required.

This newly-invented Stove-Grate has been erected in the Offices of Charles Barry, Esq., Great George-street,—of Lewis Cubitt, Esq., Bedford-square, &c. &c. It has received the most favourable Notices of the Public Press, and of the leading Scientific Publications; together with numerous Testimonials from Clergymen, Gentlemen, Architects, &c., from which the following have been selected, as expressive of the opinions of those parties who have had them in use.

From G. W. ALEXANDER and Co., Bankers.

60, Lombard-street, December 24th, 1849.

Mr. William Pierce, of Jermyn-street, has fixed a Warm-Air Stove in our office, with an open fire place, which burns well without any annoyance from smoke or unpleasant effluvia, and which affords us much satisfaction.

G. W. ALEXANDER and Co.

From Rev. WILLIAM COOKE, St. Pancras.

23, Keppel-place, Fitzroy-square, February 9th, 1850.

Mr. William Pierce has placed a Warm-Air Stove in the Schools attached to the Chapel of St. John the Evangelist, Charlotte-street, Fitzroy-square, and I have great pleasure in testifying to its perfect efficiency. The room, although it contains a large quantity of glass, is perfectly warm and comfortable, and the atmosphere free from any sulphurous smell, or smoke, or any thing that can cause oppressive sensations. I have never seen so small a Stove throw out so much pure warm air.

I shall be very happy to show the Stove in operation to such persons as may be desirous of seeing it.

WILLIAM COOKE,
Incumbent of St. John the Evangelist, St. Pancras.

From Rev. R. W. SUTTON,

Layer Breton, near Kelvedon, Essex, December 18, 1849.

Sir,—I have much pleasure in remitting the amount of your account. I had purposed calling, in order to express the satisfaction the Stove gives; but as I am not likely to visit London so soon as I expected, I take this mode of making known how completely the Stove effects all you stated concerning it.

I remain, yours very sincerely,
R. W. SUTTON.

Mr. W. Pierce.

From Rev. SAMUEL MARTIN,

Westminster Chapel, February 21st, 1850.

The Committee for superintending the Repairs and Warming of Westminster Chapel have great pleasure in testifying to the efficiency of Mr. Pierce's Pyro-Pneumatic Stove-Grates, which have been used in Westminster Chapel during the months of November, December, January, and February, and which have realised all that was promised by the Inventor, both in the Warming and Ventilating of the building.

SAMUEL MARTIN, Chairman of the Committee, and Minister of the Chapel.

Mr. Pierce, Jermyn-street.

From Rev. GRENVILLE PHILLIMORE,

Shiplake, near Reading, Nov. 5, 1850.

Sir,—In answer to your inquiries relative to the stove you put up at Wargrave Church, I am very willing to acknowledge that, in my opinion, your stove was as efficacious as could possibly be expected, and always distributed a great volume of pure and tepid air throughout the building.

I am, Sir, your well-wisher,
GRENVILLE PHILLIMORE.

Mr. William Pierce.

From Rev. F. S. NORGATE.

Spurstow Rectory, Dec. 24, 1850.

Sir,—The Pyro-Pneumatic Stove Grate you sent me has been in operation for some time in my hall. The warmth of the air emitted from it is very agreeable, and at this moment of writing, a thermometer placed on the top of the stove is now showing 104 degrees (Fahrenheit), when placed by suspension about 2 inches above the top it marks 81 degrees.

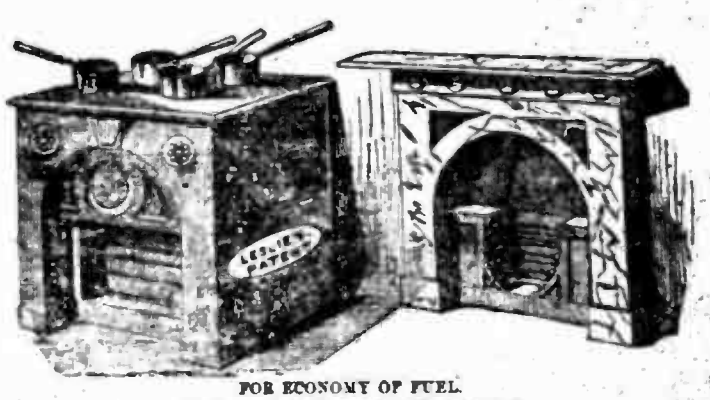
I remain, Sir, yours faithfully,
F. S. NORGATE.

Mr. Pierce, Jermyn-street.

MANUFACTORY AND SHOW ROOMS, 5, JERMYN STREET, REGENT STREET.

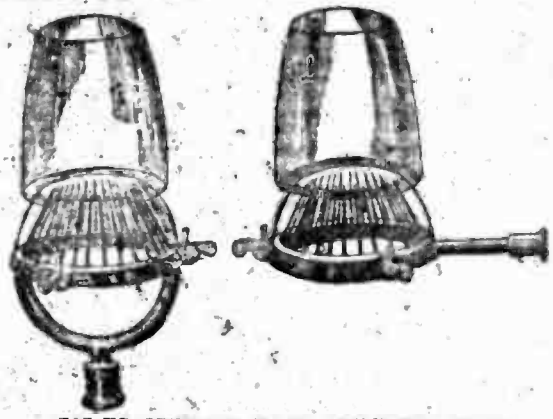
SOLE AGENT FOR NICHOLSON'S PRIZE COTTAGER'S RANGE, NEW PATENT COOKING STOVE, AND HIS RECENT IMPROVEMENTS IN STOVE-GRATES, &c.

MR. LESLIE'S PATENTS.



FOR ECONOMY OF FUEL.

In great variety of forms from 20s. upwards.



FOR HEALTHY AND CHEAP COMBUSTION OF GAS.

These patents comprise his peculiar method of purifying the gas: his small copper and iron tube burners, and his glass combustion chambers, superseding the old dear wasteful gas chimney.

These combustion chambers are the result of the great philosophical discovery Mr. Leslie made, that any given portion of gas required for the full development of its light a particular area and configuration of glass chamber, in which it was to be burnt. These various patents have attracted the attention of most of our own chemists and natural philosophers, as well as those of foreign states. Professor Brande introduced it at the Royal Institution in February, 1840; and in a recent report to Government, Dr Lyon Playfair estimates the combined advantages of Mr. Leslie's patents at 71 per cent. as a minimum. In Vol. III. page 453, of the *Patent Journal*, will be found the specification, with accompanying diagrams, of this patent, and we now add a few practical results.

General Post-Office.—At this immense establishment, the consumption of gas in the year 1847 was 4,377,700 cubic feet, at 7s. per 1,000—1,447 lbs. 9d. The improvements effected by Mr. Leslie's patents at the Banking-house of Messrs. Smith, Payne, and Smiths led to an introduction to the Post-Office; seven burners were put up, which became choked every night. Mr. Leslie explained that it was the great impurity in the gas, and advised, as he had advised Messrs Smith, Payne, and Smiths, to purify all the gas. It was done, and a most beneficial result instantly followed. He was then ordered by the Postmaster-General, with the sanction of the Treasury, to make a great extension of his system; and in January, 1849, in seven only of the offices of the Inland department, Mr. Leslie took off the fifteen-hole Argand burners, and substituted 228 of his patent copper tube burners, which have been acting ever since with great sanitary and economic advantage, thus saving the entire gas consumption of 420 Argand burners. About twenty-three millions of cubic feet of gas have passed through his purifying process at the Post-Office since October, 1847. Various obstructions out of the Post-Office have, until very recently, prevented the further extension of Mr. Leslie's system; the whole arrangement is known to Mr. Leslie, and will in due time be published. But during the last fortnight the London district has been placed on Mr. Leslie's plan, as in the Inland department, and in one room fifty-two fifteen hole Argand burners have been superseded by eleven of Mr. Leslie's patent tube burners, each of which consumes four feet per hour, to the manifest advantage of the health of the officers on duty, and the public expenditure. In this department about 140 fifteen-hole Argands burners have already been extinguished, as utterly useless, and great deleterious to the health of the people employed by the products of atmospheric gas consumption. The whole internal and external lighting of the General Post-Office, including the Money-order Office, cost last year 1,400*l.* per hour. The most moderate computation of the present saving, taking into consideration the enormous increase of business and additional offices, will be three millions of cubic feet of gas per annum at the General Post-Office, with the gratifying fact that the offices already completed by Mr. Leslie never were so well lighted, nor the atmosphere of the rooms so healthy and comfortable.

Offices of the Commissioners of Her Majesty's Woods, &c.—All Mr. Leslie's patents have been in operation for two years; the internal and external burners have on the average cost the 6d. each for gas during the last year.

The Green Park Public Lights.—These burners are Mr. Leslie's, and exhibit the best and most economical specimen of street lighting in the metropolis. The enormous waste of gas in the streets by the bats-wing burner may be contrasted with the fact, that Mr. Leslie's burners for the gas consumed in the Green-park have realised the company 4s. per 1,000 cubic feet. Dr. Lyon Playfair has, in the report now before the Government, stated that Mr. Leslie's burner, using the same quantity of gas, gives more than double the light of the bat's-wing and fish-tail burners. The Ordnance and Foreign Offices are also under Mr. Leslie's patents. The great banking-houses of Messrs. Smith, Payne, and Smiths; Hoare, Barbett, and Co.; Coutts and Co.; the Royal British Bank; and many of the leading merchants and the trading classes, as well as the inmates of the West-end mansions are enjoying the advantages of these patents. The public press were early in perceiving the improvements which affected the health and comfort of their compositors. The proprietors of *Bell's Life in London*, the *Observer*, the *Morning Chronicle*, all have these patent purifiers, and Leslie's burners throughout their offices.

The Thames Tunnel.—This wonderful work, where, 70 feet below the Thames, about 100 of Leslie's burners are constantly burning, day and night. The able and distinguished resident engineer and superintendent of that work, Mr. W. Mason, Esq. has, during three years, most favourably reported to his court of directors as to the sanitary and economic effects of Leslie's system. We make the following extracts:—"August 4th, 1847. I have procured thirty glass combustion chambers from Mr. Leslie, and had seventy five fixed on the Rotherhithe side of the tunnel; they are, I think, the best things ever introduced for economy in the gas world. The consumption of each burner is now about 4½ feet per hour, with a steady, uniform light." Having obtained permission from the directors immediately to carry out the improvement, he, in September, 1847, reports "that although the burners in the tunnel are increased from 118 to 134, the consumption of gas is much less than any previous year."

May 3rd, 1848, he reports that in the quarter ending March, the saving of gas was 207,126 cubic feet.

April, 1849, Mr. Mason further reports and shows that the saving of the quarter is 254,280 cubic feet—the tunnel having nearly double the light.

July, 1849, Mr. Mason again reports that the "Leslie Gas-burner continues to act well; the light in the tunnel is far better than at any previous period. The following is the gas consumption for the months of June:—

June, 1847,	with 118 burners,	167,688	cubic feet.
" 1848	" 118	"	154,800 "
" 1849	" 143	"	177,760 "

Every fish-tail burner that was displaced by Leslie's tube-burner, was a great increase of light, and decrease of gas consumed,—the practical results being in strict accordance with the very able scientific report of Dr. Lyon Playfair, now before the Government, that Leslie's burner, with the proper sized glass combustion chamber, and an equal quantity of gas, gave more than double the light that the bats-wing or fish-burner could produce.

The wonderful effects of Leslie's purifier, after the General Post-office official documents, can only where be so well exhibited as in the Thames Tunnel, where a continuous record of the state of the gas before it enters and after it has passed the purifier is kept. Upwards of three millions and a half of cubic feet of gas have passed the purifier, without the slightest stain being discovered, or the purifier having once been replenished.

ON THE ECONOMY OF FUEL.

These patents are equal, in a scientific point of view, with Mr. Leslie's discoveries in the combustion of gas, and their results are in every way satisfactory. The fireplace is at the back, bottom, and sides of fire brick, with slight bars of iron to keep the coal from falling out,—the only admission of air to support combustion being in front. The radiation of heat comes along the floor of the room, instead of passing up the chimney; by this means the expenditure of coal is lessened 30 per cent., and the ash left is not quite 1½ per cent. of the coal consumed.

The patentee informs us that his inventions are in use in a great many public buildings, and that among the distinguished persons who have patronised him may be named the Earl of Lonsdale, Lord Rivers, the Earl of Carlisle, the Duke and Duchess of Sutherland, the Duke of Richmond, the Earl and Countess of Roshcroph, the Commissioners of Her Majesty's Woods, &c., the Foreign Office, the Travellers' Club, Sir Benjamin Hall, Bart., Lord Hadley, Sir Watkins Williams Wynne, Lord Francis Gordon, the Proprietors of the *Times*, *Bell's Life in London*, and the Chronicle; Lord Johnstone, the Marquis and Marchioness of Clanricarde, the Earl of Macclesfield, the Earl Cadogan, Viscount and Viscountess Chelsea, Lord and Lady William Fitzroy, Earl Fortescue, Viscount Hill, Viscountess Eberington, Lord and Lady Ashburton, the Earl and Countess of St. Germains, &c. &c.

The price of these stoves being so moderate for some may be had at as low a price as 12*l.* can form no obstacle to their general use, and we have no hesitation in strongly recommending them to the public.

LESLIE'S GAS ENGINEERING OFFICES AND MANUFACTORY, 59, CONDUIT-STREET LONDON.

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